APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/292,191	04/15/1999	WILLIAM MEYER SMITH	AT9-98-355	3200

7590 06/10/2004	EXAMINER
JAMES J MURPHY	WILLETT, STEPHAN F
5400 RENAISSANCE TOWER	

ART UNIT	PAPER NUMBER
2141	

1201 ELM STREET
DALLAS, TX 752702199

DATE MAILED: 06/10/2004

(3

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 April 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-9,11-18,20-27 and 29-33* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-9,11-18,20-27 and 29-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Title Change

1.   An Examiner's Amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. §

1.312. To ensure consideration of such an amendment, it must be submitted no later than the

payment of the Issue Fee.

2.   Pursuant to MPEP 606.01, the title has been change to read: --AN APPARATUS AND

METHOD FOR SCHEDULING SERVICE OF NETWORK SERVICE REQUESTS BASED

ON AVAILABLE NETWORK CAPACITY AND A PRESELECTED SUBFILE OR BASED

ON TIME SLOTS THAT INCLUDE PORTIONS RESERVED FOR REAL TIME OR

SCHEDULED REQUESTS AND PRIORITY REQUESTS--.

Examiner's Amendment

3.   In claim 18, after the word "time slots and" delete "-12" and replace with ",".

4.   In claim 27, after the word "said first portion includes a" delete "third portion".

Claim Rejections - 35 USC § 103

5.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and

potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 4, 13, 22, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Miller et al. with Patent Number 5,920,701 in view of Boyle with Patent Number 6,119,167.

8.   Regarding claim(s) 4, 13, 22, 32, Miller teaches determining availability of resources,

col. 4, lines 46-55 for network requests from a client as content server itself, or replication

server, or scheduler to a content server as a server, col. 4, lines 35-40; col. 5, lines 3-13. Miller

teaches allocating a scheduled time, col. 7, lines 54-56; col. 10, lines 54-57, to send a network

request by the client or scheduler or replication server, col. 12, lines 24-29 for software and data,

col. 5, lines 15-19. Miller teaches breaking a file into subfiles or data frames as "packets which

together constitute a computer file", col. 5, lines 19-23. Miller teaches the invention in the above

claim(s) except for explicitly teaching resending a requested subfile. In that Miller operates to

transfer data over a network, the artisan would have looked to the computer network arts for

details of implementing scheduling operations. In that art, Boyle, a related data distributing

network teaches "notification objects delivered to this address are scheduled for delivery", col.

26, lines 14-15 in order to provide requested content. Boyle specifically teaches resending a

packet, col. 23, lines 34-38 wherein a packet is part of a message or file. Further, Boyle suggests

"an extended schedule", col. 24, line 38 to incorporate all equivalent types of scheduling. The

motivation to incorporate resending subfiles insures that network performance is increased.

Thus, it would have been obvious to one of ordinary skill in the art to incorporate resending

subfiles as taught in Boyle into the network scheduling system described in the Miller patent

because Miller operates with timely transferring data and Boyle suggests that optimization can

be obtained by specifically resending subfiles or packets. Therefore, by the above rational, the

above claim(s) are rejected.

9.   Claims 2-9, 11-18, 20-27, 29-33 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Miller et al. with Patent Number 5,920,701 in view of Phaal with Patent

Number 6,006,269.

10.   Regarding claim(s) 4, 13, 22, 32, Miller teaches determining availability of resources,

col. 4, lines 46-55 for network requests from a client as content server itself, or replication

server, or scheduler to a content server as a server, col. 4, lines 35-40; col. 5, lines 3-13. Miller

teaches allocating a scheduled time, col. 7, lines 54-56; col. 10, lines 54-57, to send a network

request by the client or scheduler or replication server, col. 12, lines 24-29 for software and data,

col. 5, lines 15-19. Miller teaches breaking a file into subfiles or data frames as "packets which

together constitute a computer file", col. 5, lines 19-23. Miller teaches the invention in the above

claim(s) except for explicitly teaching resending a request. In that Miller operates to transfer

data over a network, the artisan would have looked to the computer network arts for details of

implementing scheduling operations. In that art, Phaal, a related data distributing network

teaches "if processing resources of the server are strained, the admission control system defers

messages corresponding to new session to a later time", col. 4, lines 48-50 in order to provide

requested content. Phaal specifically teaches resending data, col. 16, line 49. Further, Phaal

suggests "the motivation for multiple classes can vary", col. 13, line 43 to incorporate all

equivalent types of real time priorities. The motivation to incorporate resending insures that

network performance is increased. Thus, it would have been obvious to one of ordinary skill in

the art to incorporate resending requests as taught in Phaal into the network scheduling system

described in the Miller patent because Miller operates with timely transferring data and Phaal

suggests that optimization can be obtained by specifically resending requests. Therefore, by the

above rational, the above claim(s) are rejected.

11.   Regarding claim(s) 2, 11, 20, 28-30, Miller teaches selecting and notification of a time

slot, col. 12, lines 24-29, to said client, col. 6, lines 28-30, the client being the content source.

12.   Regarding claim(s) 3, 12, 21, Miller teaches a plurality of time slots, col. 6, lines 15-18.

13.   Regarding claim(s) 5-6, 14-15, 23-24, Miller teaches real time servicing of requests as

emergency overage, highest priority or during current transmissions, col. 5, lines 57-58, col. 6,

lines 52-56, col. 13, lines 27-30.

14.   Regarding claim(s) 7, 16, 25, Miller teaches a portion of time reserved for certain

requests, col. 7, lines 15-16, col. 8, lines 50-52.

15.   Regarding claim(s) 31, Miller teaches Internet use, col. 5, line 1.

16.   Regarding claim(s) 8-9, 17-18, 26-27, 33, Miller teaches determining availability of

resources, col. 4, lines 46-55 for network requests from a client as content server itself, or

replication server, or scheduler to a content server as a server, col. 4, lines 35-40; col. 5, lines 3-

13. Miller teaches allocating a scheduled time, col. 7, lines 54-56; col. 10, lines 54-57, to send a

network request by the client or scheduler or replication server, col. 12, lines 24-29 for software

and data, col. 5, lines 15-19. Miller teaches the invention in the above claim(s) except for

explicitly teaching resending a request and real & priority portions of a time slot. In that Miller operates to transfer data over a network, the artisan would have looked to the computer network arts for details of implementing scheduling operations. In that art, Phaal, a related data distributing network teaches "if processing resources of the server are strained, the admission control system defers messages corresponding to new session to a later time", col. 4, lines 48-50 in order to provide requested content. Phaal specifically teaches resending data, col. 16, line 49. Phaal teaches a time slot portion for real time requests and a time slot portion for a scheduled request as "sessions in-progress" or "held open" slots, col. 5, lines 35-40, col. 13, lines 28-34; col. 14, lines 46-49. Phaal teaches priorities given to certain content similar to the priority given to real time content, col. 9, lines 17-28. Further, Phaal suggests "the motivation for multiple classes can vary", col. 13, line 43 to incorporate all equivalent types of real time priorities. The motivation to incorporate resending requests and real & priority time portions insures that network performance is increased Thus, it would have been obvious to one of ordinary skill in the art to incorporate resending requests and real & priority time portions as taught in Phaal into the network scheduling system described in the Miller patent because Miller operates with timely transferring data and Phaal suggests that optimization can be obtained by specifically resending requests and using real & priority time portions. Therefore, by the above rational, the above claim(s) are rejected.

Response to Amendment

17.   The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

18.   Based on the new grounds for rejection the applicant's arguments are moot. The broad

claim language used is interpreted on its face and based on this interpretation the claims have

been rejected.

19.   Applicant suggests "the Examiner has not presented prima facie case of obviousness",

Paper No. 12, Page 12, lines 9-10 to combine. First, Applicant's arguments fail to comply with

37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable

invention without specifically pointing out how the language of the claims patentably

distinguishes them from the cited portions of the references and relevant portions of the

reference. However, Phaal teaches "if processing resources of the server are strained, the

admission control system defers messages corresponding to new session to a later time", col. 4,

lines 48-50. Resending data or even subfiles as mentioned in Miller according to a schedule is

suggested by Phaal. Thus, Applicant's arguments can not be held as persuasive regarding

patentability.

20.   Applicant suggests "there is no language in the cited passage of breaking a file into

subfiles", Paper No. 12, Page 12, lines 30-31. However, Miller teaches breaking a file into

subfiles or data frames as "packets which together constitute a computer file", col. 5, lines 19-23

in legacy retransmission protocols such as TCP. Thus, Applicant's arguments can not be held as

persuasive regarding patentability.

21.   Applicant suggests "Phaal does teach two classes of service ... however, there is no

language in Phaal that a reserved time slot includes a portion reserved for servicing requests

having priority", Paper No. 12, Page 15, lines 1-4. Surely, the classes can be scheduled with the

priorities and the reliance on the references abstracts is misplaced. The references should not be

read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what

was reasonable based on the subject matter as a whole as would have been understood at the time

the invention was made to a person having ordinary skill in the art to which the subject matter

pertains. The clear description in the reference is not obfuscated by the numerous other

suggested usages of said description in the reference. In addition, implicitly, impliedly and

inferentially, various schedule times with their associated priorities are taught and language

identical or verbatim is not required in an obvious rejection. Note that reasonable "inferences",

and "common sense" may be considered in formulating rejections for obviousness. Specifically,

In re Preda, 401 F.2d 825, 159 USPQ 342, 344 (CCPA 1968) states "in considering the

disclosure of a reference, it is proper to take into account not only specific teachings of the

reference but also the inferences which one skilled in the art would reasonably be expected to

draw therefrom." Also, *In re Bozek*, 416 F.2d 738, 163 USPQ 545, 549 (CCPA 1969) states that

obviousness may be concluded from "common knowledge and common sense of the person of

ordinary skill in the art without any specific hint or suggestion in a particular reference".

Additionally, see *In re Gauerke*, 24 CCPA 725, 86 F.2d 330, 31 USPQ 330, 333 (CCPA 1936),

and *In re Libby*, 45 CCPA 944, 255 F.2d 412, 118 USPQ 94, 96 (CCPA 1958), and *In re Jacoby*,

309 F.2d 738, 125 USPQ 317, 319 (CCPA 1962), and *In re Wiggins*, 488 F.2d 538, 543, 1979

USPQ 421, 424 (CCPA 1973). Thus, Applicant's arguments can not be held as persuasive

regarding patentability.

Conclusion

1.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

2.   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

3.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The

examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

4.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rupal Dharia, can be reached on (703) 305-4003. The fax phone number for the

organization where this application or proceeding is assigned is (703) 746-7239.

5.   Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-9605.

22.

sfw

August 19, 2004

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER